

Docket No.: AVZ-020CNRCE  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Rima Kaddurah-Daouk

Application No.: 09/852,966

Confirmation No.: 5588

Filed: May 10, 2001

Art Unit: 1618

For: USE OF CREATINE OR CREATINE  
COMPOUNDS FOR SKIN PRESERVATION

Examiner: V. Y. Kim

**REPLY BRIEF**

MS Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

This Reply Brief is in response to the Examiner's Answer to Applicant's Appeal Brief mailed from the U.S. Patent and Trademark Office on May 18, 2007 for the above-identified patent application.

**The Status of the Claims** begin on page 2 of this paper.

**The Grounds of Rejection to be Reviewed on Appeal** begin on page 3 of this paper.

**Remarks** begin on page 4 of this paper.

**Appendices A and B** begin after page 5 of this paper.

**STATUS OF THE CLAIMS**

A. Total Number of Claims in Application

There are 17 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 1-67, 71, 74, 86 and 87
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 68-70, 72, 73, 75-85 and 88
4. Claims allowed: none
5. Claims rejected: 68-70, 72, 73, 75-85, and 88

C. Claim on Appeal

The claims on appeal, listed in Appendix A, are claims 68-70, 72, 73, 75-85, and 88.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Appellant presents the following issues for review:

1. Whether claims 68-70, 75-80, 84 and 85 are properly rejected under 35 U.S.C. §103(a) as obvious over Yu *et al.* (U.S. Patent No. 5,702,688; Appendix B) in view of Kaddurah-Daouk *et al.* (U.S. Patent No. 5,324,731; Appendix C) and Kaddurah-Daouk *et al.* (International Application Publication No. WO 96/14063; Appendix D).
2. Whether claims 68-70, 75-85 and 88 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Le Fur *et al.* (U.S. Patent No. 5,256,649; Appendix E) in view of Carniglia (U.S. Patent No. 4,871,718; Appendix F) and Kaddurah-Daouk *et al.* (International Application Publication No. WO 96/14063; Appendix D) or Kaddurah-Daouk *et al.* (U.S. Patent No. 5,321,030; Appendix G).

### ARGUMENTS

The Examiner has requested clarification regarding Appendices B-G submitted with the Amended Appeal Brief filed with the U.S. Patent and Trademark Office on January 22, 2007. In particular, the Examiner asserts that “appendices B-G has [*sic*] not been found nor attached.”

Appellant respectfully submits that Appendices B-G were submitted with the Amended Appeal Brief filed on January 22, 2007, as evidenced by the copy of the return receipt postcard date-stamped by the Office on January 22, 2007 (Appendix B). Moreover, Appellant respectfully points out that Appendix D (International Patent Application Publication No. WO 96/14063) is available on PAIR and that Appendices B, C and E-G are U.S. Patent documents available to the Examiner through the Office. However, upon request, Appellant will re-submit the Appendices for the Examiner’s convenience.

Appellant hereby reiterates that the rejected claims do not stand or fall together for the reasons set forth in the Appeal Brief and Amended Appeal Brief filed on November 7, 2006 and January 22, 2007, respectively. Moreover, Appellant respectfully submits that the references, either alone or in combination, do not provide any teaching, suggestion or motivation for the claimed methods for increasing energy reserves in the skin of a subject, sustaining energy production in the skin of a subject or modulating energy flow in the skin of a subject in the skin of a subject suffering from a skin disorder by administering to a subject creatine or a salt thereof, such that energy reserves are increased, the energy production is sustained or the energy flow is modulated in the skin, as claimed in claims 68, 69 and 70, respectively. Further, the references, either alone or in combination, do not provide any teaching, suggestion or motivation for the claimed methods in which the creatine or salt thereof is creatine monohydrate, as claimed in claim 72, or creatine citrate, as claimed in claim 73. Additionally, the references, either alone or in combination, do not provide any teaching, suggestion or motivation for the claimed methods in which of an effective amount of a skin preserving agent (claim 75), such as an antioxidant (claim 76) (*e.g.*, vitamin E and CoQ<sub>10</sub>, as claimed in claim 77), an energy-enhancing agent (claim 78) (*e.g.*, ATP, nicotinamide and pyruvate, as claimed in claim 79), or a vitamin or a vitamin precursor (claim 80) (*e.g.*, E, C, B5, B6 and B9, as claimed in claim 81) is co-administered with creatine or salt thereof. Moreover, the references, either alone or in combination, do not provide any teaching, suggestion or motivation for the methods in which a

sunscreen or a sunblock (claim 82), such as zinc oxide or titanium dioxide as claimed in claim 83, is co-administered with creatine or salt thereof. Neither do the references, either alone or in combination, provide any teaching, suggestion or motivation for the claimed methods in which a pharmaceutical carrier suitable for topical administration (claim 84) is administered with creatine or salt thereof or for the claimed methods in which the administration of the creatine or creatine salt is to a human subject (claim 85). Finally, the references, either alone or in combination, do not provide any teaching, suggestion or motivation for the claimed methods in which the skin disorder is skin wrinkles, as claimed in claim 88.

In sum, none of the cited references, either alone or in combination, provide any teaching or suggestion which would have motivated one of ordinary skill in the art to use the methods as claimed in the pending claims. Therefore, Appellant respectfully submits that claims 68-70, 72, 73, 75-85 and 88 are patentable over the cited references.

Dated: July 18, 2007

Respectfully submitted,

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**APPENDIX A**

**Claims Involved in the Appeal of Application Serial No. 09/852,966**

**Claims 1- 67 (Cancelled)**

68. **(Previously Presented)** A method for increasing energy reserves in the skin of a subject, comprising administering to said subject an effective amount of creatine or a salt thereof, such that the energy reserves in the skin of said subject is increased, wherein said subject is suffering from a skin disorder associated with free-radicals, aging, sun radiation, stress or fatigue.

69. **(Previously Presented)** A method for sustaining energy production in the skin of a subject, comprising administering to said subject an effective amount of creatine or a salt thereof, such that energy production the skin of said subject is sustained, wherein said subject is suffering from a skin disorder associated with free-radicals, aging, sun radiation, stress or fatigue.

70. **(Previously Presented)** A method for modulating energy flow in the skin of a subject, comprising administering to said subject an effective amount of creatine or a salt thereof, such that the energy flow in the skin of said subject is modulated, wherein said subject is suffering from a skin disorder associated with free-radicals, aging, sun radiation, stress or fatigue.

71. **(Cancelled)**

72. **(Previously Presented)** The method of claim 68, 69, or 70, wherein said creatine salt is creatine monohydrate.

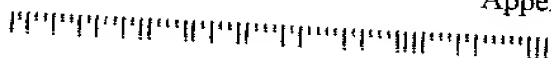
73. **(Previously Presented)** The method of claim 68, 69, or 70, wherein said creatine salt is creatine citrate.

74. **(Cancelled)**

75. **(Previously Presented)** The method of any one of claims 68-70, further comprising co-administering to said subject an effective amount of a skin preserving agent.

76. **(Previously Presented)** The method of claim 75, wherein said skin preserving agent is an antioxidant.
77. **(Previously Presented)** The method of claim 76, wherein said antioxidant is CoQ<sub>10</sub> or vitamin E.
78. **(Previously Presented)** The method of claim 76, wherein the skin preserving agent is an energy-enhancing agent.
79. **(Previously Presented)** The method of claim 78, wherein said energy enhancing agent is selected from the group consisting of ATP, nicotinamide and pyruvate.
80. **(Previously Presented)** The method of claim 75, wherein said skin preserving agent is a vitamin or a vitamin precursor.
81. **(Previously Presented)** The method of claim 80, wherein said vitamin is selected from the group consisting of E, C, B5, B6, and B9.
82. **(Previously Presented)** The method of any one of claims 68-70, further comprising the coadministration of a sunscreen or sunblock.
83. **(Previously Presented)** The method of claim 82, wherein said sunscreen or sunblock is zinc oxide or titanium dioxide.
84. **(Previously Presented)** The method of any one of claims 68-70, further comprising the coadministration of a pharmaceutical carrier suitable for topical administration.
85. **(Previously Presented)** The method of any one of claims 68-70, wherein said subject is a human.
86. **(Cancelled)**
87. **(Cancelled)**
88. **(Previously Presented)** The method of claim 68, 69, or 70, wherein said skin disorder is skin wrinkles.

Appendix B



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Atty Docket No.: AVZ-020CNRCE

Inventor: Rima KADDURAH-DAOUK

Application No.: 09/852,966-Conf. #5588

Filing Date: May 10, 2001

Title: USE OF CREATINE OR CREATINE COMPOUNDS FOR SKIN PRESERVATION

**Documents Filed:**

Appeal Brief Transmittal (1 page)

Fee Transmittal (1 page, in duplicate)

Appeal Brief (17 pages)

Two Month Request for Extension of Time Under 37 CFR 1.136(a) (1 page)

Response to Notification of Non-Compliant Appeal Brief Under 36 CFR §41.37 (2 pages)

Appendix A - Claims Involved in the Appeal (3 pages)

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Appendix B - U.S. Patent No. 5,702,688 (20 pages)

Return Receipt Postcard

Appendix C - U.S. Patent No. 5,324,731 (72 pages)

Appendix D - WO 96/14063 (61 pages)

Appendix E - U.S. Patent Number 5,256,640 (7 pages)

Appendix F - U.S. Patent Number 4,871,718 (15 pages)

Appendix G - U.S. Patent Number 5,321,030 (67 pages)



Via: Express Mail: Airbill No. EV 956 470 543 US

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Date: January 22, 2007